

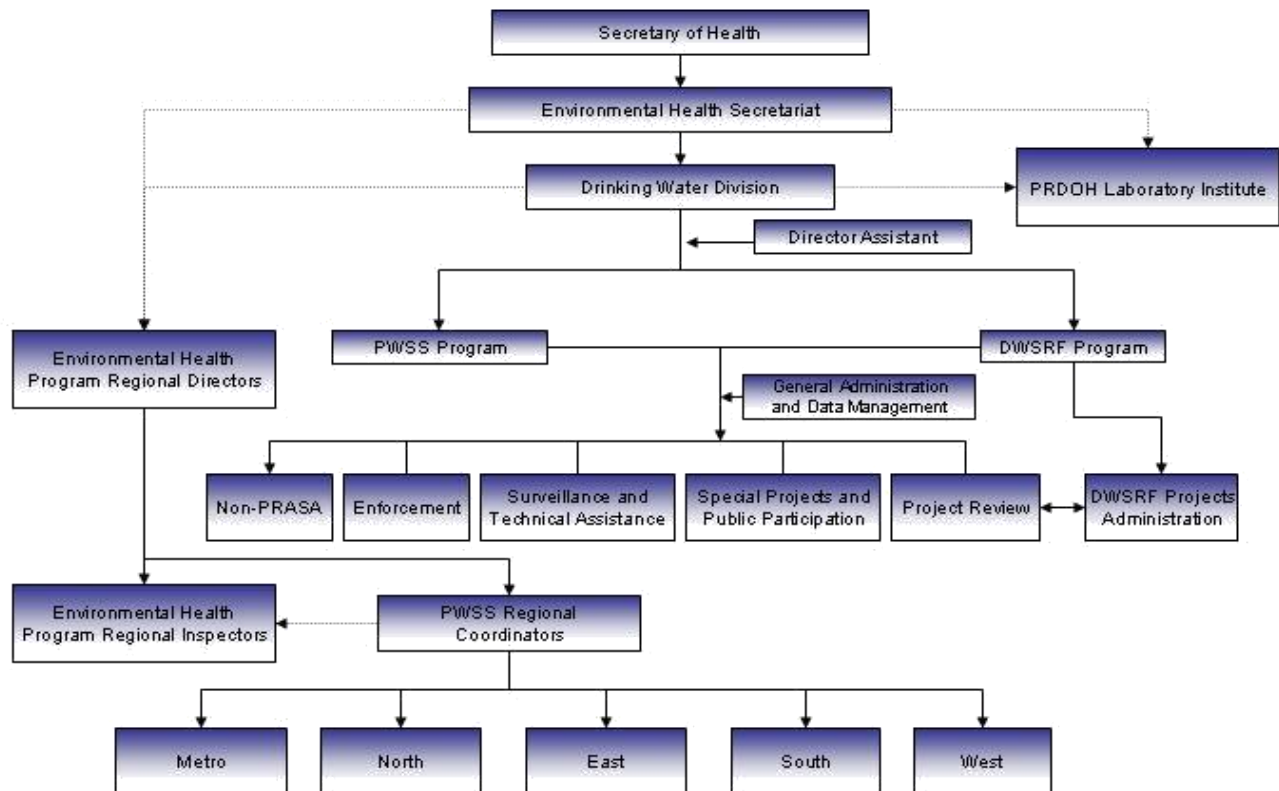
INTRODUCTION

The Safe Drinking Water Act (SDWA, 1974) objective is to ensure public health protection through compliance by public water systems (PWS) with all health-based standards, including all monitoring and reporting requirements. The 1996 amendments require PWS to report their water quality annually to their customers and States to produce an annual compliance report.

The Puerto Rico Department of Health PWSS Program submits this document to the Federal Environmental Protection Agency (EPA) as part of the SDWA primacy requirements and the corresponding regulations. This annual report contains the main activities performed throughout federal fiscal year 2011 (FFY-11: October 2010 thru September 2011).

To achieve the Program objectives and goals, different sections have been established. Currently, the Puerto Rico Drinking Water Division is divided in two (2) Programs (Grants) and several sections, as follows:

FIGURE 1: ORGANIZATIONAL FLOWCHART



As required, the activities described below are related to primacy revision applications and approvals, regulation, surveillance and compliance monitoring, compliance and enforcement actions, special projects, seminars, trainings, special activities, public participation, and program management, among others, performed by the two Programs.

A. PRIMACY REQUIREMENTS

EPA requires State PWSS Programs to review and adopt all new regulations in order to obtain or retain the primacy of the drinking water regulations, as established in §1413 of SDWA and 40 Code of Federal Regulations (CFR) Part 142.

PRDOH successfully undertook the following activities as established in the Microbial Disinfectants Byproducts 2 (Stage 2 D/DBP and Long Term 2 during FY-11:

- Contacted systems and handled all system interactions.
- Provided technical support to systems that requested our assistance.
- Notified systems of Initial Distribution System Evaluation (IDSE) reports that needed to be revised and modified prior to determine final approval.
- Issued an enforcement notice of violation (NOV)
- Assisted EPA in their Data Verification Review Audit to the PWSS Program MDBP2 related documents.

B. PRASA - ENFORCEMENT ACTIONS AND COMPLIANCE

The enforcement section is responsible for supervising the Puerto Rico Aqueduct and Sewer Authority (PRASA) system's compliance. Compliance and enforcement actions are based on the revision of compliance monitoring results submitted by PRASA, inspections, sanitary surveys findings and others surveillance activities. The main enforcement actions during FY-11 are described below:

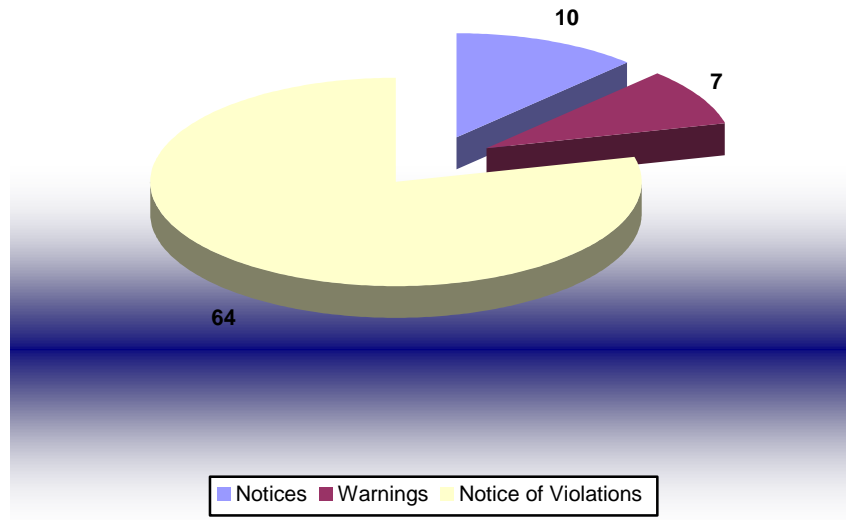


FIGURE 2: PRASA FY-11 ENFORCEMENT ACTIONS

The following table summarizes the status of PRASA's systems compliance by main rules or group of contaminants during FY-11:

TABLE 1: PRASA FY-11 COMPLIANCE SUMMARY STATUS

RULE OR REQUIREMENT	SYSTEM'S TOTAL	VIOLATION TYPE	PERSISTENT SYSTEMS OR SNC ¹	INTERMITTENT SYSTEMS ²	COMMENTS
Bacteriology	188	Maximum Contaminant Level	0	21	Out of 2 PRASA Bacti MCL SNC's by EOY-10, all two (2) systems registered less than 4 violations. No new systems were added, for a total of 0 SNC's by EOY-11. 100% achievement.
		Monitoring/Reporting	0	12	
Turbidity	109 ³	Treatment Technique	1	10	Out of 5 PRASA Turb MCL SNC's by EOY-10, four (4) systems registered less than 4 violations, one (1) system remained for a total of one (1) SNC's by EOY FY 11. 80% achievement.
		Monitoring/Reporting	0	0	

¹ Systems with 4 or more violations in a twelve consecutive month period or Significant Non Compliers (SNC) systems.

² Systems with 1, 2 or 3 violations in a twelve consecutive month period.

³ Number of surface water systems with filtration plants.

RULE OR REQUIREMENT	TOTAL OF SYSTEMS/ FILTRATION PLANTS	SYSTEMS THAT EXCEEDED THE RUNNING ANNUAL AVERAGE (RAA) BY SEPTEMBER 2011	COMMENTS
Total Trihalomethanes (TTHMs)	188 systems	1	Out of 2 THM SNC's by EOY-10, all two (2) systems returned to compliance. For FY-11, one (1) new system exceeded the THM RAA. 50% achievement.
Haloacetic Acids (HAA5)		6	Out of 18 HAA5 SNC's by EOY-10, 15 systems returned to compliance. For FY-11, three (3) systems remained and three (3) systems were added, for a total of six (6) systems that exceeded the HAA5 RAA. 66% achievement.

RULE OR REQUIREMENT	TOTAL OF FILTRATION PLANTS	FILTRATION PLANTS THAT EXCEEDED THE RUNNING ANNUAL RATIO BY SEPTEMBER 2011	COMMENTS
Total Organic Carbon (TOC)	125 filtration plants	17	For a total of 17 plants, 13 were required to comply with Step 2 procedure, accordance to the regulation. Four (4) plants remained out of compliance compare to EOY 10.

RULE OR REQUIREMENT	SYSTEMS	COMPLIANCE	COMMENTS
Consumer Confidence Report (CCR)	188	All systems prepared and submitted copy of the CCR for 2010.	Copies of the CCRs and certification letter were received according to the regulation.
Lead and Copper (L & C)	188	Seven (7) systems exceeded the action levels (AL)	Two (2) systems exceed the AL from January thru June 2011; six month period. Five (5) systems exceed the AL from June thru Sept 2011; reduced monitoring. No exceedances were registered from July thru December 2011.

C. NON PRASA- ENFORCEMENT ACTIONS AND COMPLIANCE

98% of Puerto Rico's population receives drinking water served by PRASA. However, private drinking water systems serve the remaining population of small communities. The majority of these community systems are located in rural areas throughout the Island.

As of September 2011, 298 systems are registered in our Program. Out of these, 250 are community systems, 6 are non-community- transient systems and 42 are identified as non-transient non community systems, as described in the following chart.

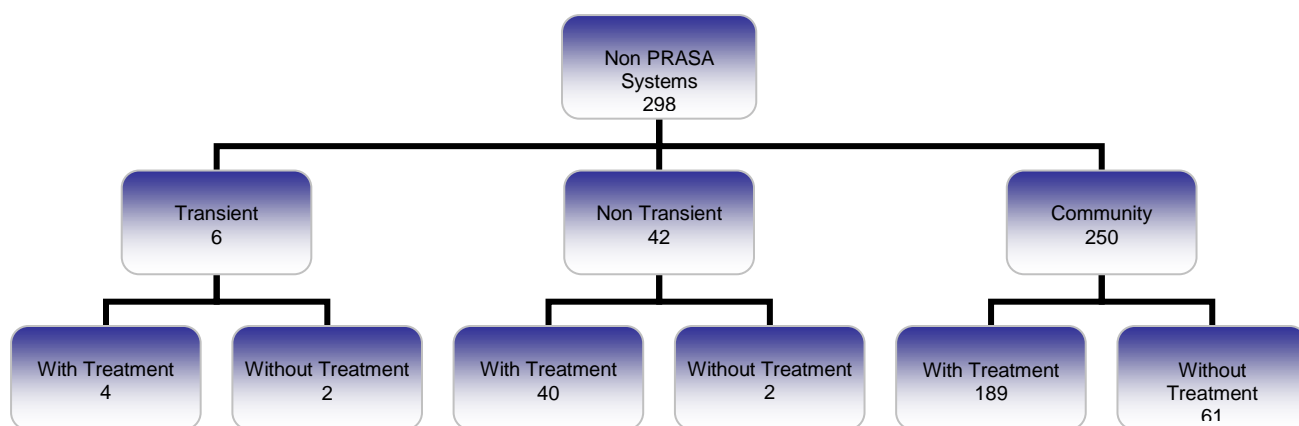


FIGURE 3: NON PRASA SYSTEMS DISTRIBUTION

The Non PRASA section has been designated to provide assistance to these systems that lack technical, managerial and financial capacity. People served by small community systems that are not well operated are more vulnerable to waterborne diseases. For the past years, the Non PRASA Strategy has been the main tool used to bring those systems into compliance by connecting the systems to the nearest PRASA systems, installing disinfection equipment or changing the surface source to an underground one.

To follow and maintain the goals established in the Non PRASA Strategy, an achievement report is prepared annually. During FY-11, the following results were obtained:

TABLE 2: NON PRASA COMPLIANCE SUMMARY STATUS

RULE	TOTAL OF COMMUNITY SYSTEMS UNDER STRATEGY	SAMPLES TAKEN	NEGATIVE SAMPLES	PERCENT NEGATIVE SAMPLES
Bacteriology	182	1,014	645	64%

REQUIREMENT	TOTAL OF COMMUNITY SYSTEMS UNDER STRATEGY	SYSTEMS WITH DISINFECTION	PERCENT OF SYSTEMS WITH DISINFECTION
Disinfection	182	144	79%

D. SPECIAL PROJECTS

Circuit Riders Project

In summary, during FY -11 PRDOH has been able to:

- Continued the established Circuit Rider Program through the implementation of the action plan and the Capacity Development Manual, including follow-up meetings and guidance to discuss the capacity requirements necessary to maintain and/or attain capacity.
- Evaluated the Circuit Riders performance implemented in 25 small systems by performing two (2) additional evaluations in each system using the Capacity Development Spreadsheet.
- Continue providing technical assistance, support and follow-up with identified limiting factors to provide innovative solutions to eliminate possible causes of significant non-compliance or violations.
- A total of 157 visits were performed to the 25 small systems identified as part of the project for a total of 385 assistances related to the three (3) areas of capacity.
- Evaluated final report and pending invoices submitted by the contractor.

The Circuit Riders Project ended on June 2011. All our anticipated Outputs and Outcomes were achieved:

- Validated the Comprehensive Performance Evaluations (CPEs) methodology for approximately 25 small systems.
- 25 systems were oriented to increase their knowledge of and compliance with the requirements of the SDWA.
- Assessed approximately 25 systems in the organization process.
- Educated small systems on DWSRF program requirements, compliance actions, fund requests and others.

Counter Terrorism Coordination Program

The Counter Terrorism Coordination Program is implemented through two grants: Grant No. WP-98279301 and Grant No. WP-98279302. The most relevant activities performed during FY-11 for Grant No. WP-98279301 were:

- Prepared and submitted closeout documents as required by grant conditions.
- Prepared and submitted annual FFR.
- Prepared and submitted modified MBE/WBE documents.
- Received and evaluated final project invoice from the contractor.

During 2011, the following activities were performed for Grant No. WP-98279302:

- A Work Plan with detailed activities was developed and submitted to EPA to initiate and finally achieve the Program Objectives/Goals.
- Discussed with the contractor the need to receive a proposal to execute a contract agreement.
- Prepared and submitted annual FFR.
- Received and evaluated new proposal submitted by the contractor.
- Prepared new contract agreement and submitted to the consultant for its evaluation, and signature.
- Prepared and submitted Grant Annual Report to EPA.

Unregulated Contaminant Monitoring Regulation Cycle 2 (UCMR-2)

UCMR 2 monitoring ended on 2010. Nevertheless, PRDOH performed the following key activity during FY-11, in accordance with the Partnership Agreement with EPA:

- Reviewed the monitoring analytical data reports received from EPA related small systems.

Unregulated Contaminant Monitoring Regulation Cycle 3 (UCMR-3)

The UCMR3 is proposing to require a determined selected group of public water systems to conduct monitoring for List 1, List 2, or List 3 unregulated contaminants. During 2011, the following activities were performed by PRDOH in accordance with the PA:

- Revised, signed, and submitted the Partnership Agreement (PA) with EPA for the implementation of UCMR3.
- Review the draft State Monitoring Plan to verify proper classification of systems and submitted it to EPA.
- Provide the proper PWS Inventory data for each PWS to use for reporting their monitoring data.
- Assembled the Large System Inventory (LSI) in the formatted spreadsheet template provided by EPA. Submitted the LSI to EPA.

E. SEMINAR

1. Annual Drinking Water Seminar

On May 17-18, 2011, the 17th Drinking Water Seminar was celebrated in the Puerto Rico Convention Center located in the municipality of San Juan, Puerto Rico. This event was sponsored by the Puerto Rico Department of Health (PRDOH), Environmental Protection Agency (EPA), American Water Works Association (AWWA-PR), "Asociación Interamericana de Ingeniería Sanitaria y Ciencias Ambientales" (AIDIS) and the University of Puerto Rico, Mayagüez Campus.

This annual activity has become an important educational tool for all professionals in the drinking water area and the regulated community. The Seminar format consisted of a combination of simultaneous and plenary conferences of relevant topics concerning drinking water regulation, public health, water treatment technology and research, among others.

2. Award Ceremony

During the Seminar, an Award Ceremony was carried out and several Non PRASA systems were recognized for their efforts to comply with drinking water regulations.

TABLE 3: LIST OF NON PRASA SYSTEMS RECOGNITION 2011

Award	System	PWS ID	Municipality
First- Excellence	Coamo Arriba	422084	Coamo
Second – Self Improvement	Mamey	556055	Patillas
Third – Community Participation	Sonador II	351023	San Sebastián

This year, the American Water Works Association granted their most important recognition, the "George Warren Fuller Award", to Eng. Juan Carlos Pérez Boffill, for his outstanding performance in the water treatment field.

PROGRAM ELEMENTS

All Program Elements were achieved successfully during FY-11. A summary of the activities carried out by the PWSS Regional and Central Office Coordinators, as well as a comparative report concerning the Program's performance actions are included in this report. See Attachment 1.

A. PROGRAM MANAGEMENT AND ADMINISTRATION

1. Program administration and supervision were continuously provided to achieve a satisfactory administration of the Safe Drinking Water Act.
2. PWSS Grant proposal for FY-12 was submitted on May 14, 2011.
3. Annual Program Work Plan as well as the development of staff and budget needs was prepared as part of the original grant applications for the FY-12.
4. The Private Laboratory Certification Program continued successfully during the FY-11.
5. All PRASA and Non PRASA monitoring results were evaluated in order to grant waivers, reduce monitoring frequency, increase monitoring, etc., in accordance with the Standardized Monitoring Framework.
6. An Enforcement and Compliance Strategy for Non-PRASA Community Water Supply Systems has been in force in collaboration with the Division of Enforcement and Compliance Assistance of the US EPA Region II and Caribbean Office (CEPD).

B. SURVEILLANCE ACTIVITIES AND TECHNICAL ASSISTANCE

1. The following table presents the main surveillance activities and technical assistance performed by type of system. See Attachment 2.

TABLE 4: SURVEILLANCE AND TECHNICAL ASSISTANCE ACTIVITIES

ACTIVITY	PRASA	NON PRASA	TOTAL
Sanitary Surveys	70	84	154
Inspections (*)	617	142	759
Field Visits	122	37	159
Cross Connections Investigations	1	1	2
Enforcement actions	181	63	244

ACTIVITY	PRASA	NON PRASA	TOTAL
Follow up actions	1,731	730	2,461
Technical Assistance	105	279	384
Chemical Contamination Investigation	16	1	17
Microbiology Contamination Investigation	3	1	4
Complaints	30	2	32
Meetings	124	63	187
Legal Notifications and Boil Orders	---	2,299	2,299

(*) Includes: Filtration Plants, Tanks, Wells inspections

- The inventory of Community and Non-Community public water supply systems was updated satisfactorily, on a quarterly basis.

Surveillance Monitoring

- A total of **4,486** bacteriological analyses were performed by DOH on PRASA systems as part of the surveillance-monitoring program. Out of these, **174** or **3.9%** percent were found positive. See Attachment 3.

TABLE 5: PRDOH BACTERIOLOGICAL SURVEILLANCE MONITORING IN PRASA SYSTEMS BY MONTH

Month	Number of samples taken	Number of positive samples	% positive
Oct 2010	398	14	3.5
Nov 2010	391	17	4.3
Dec 2011	388	22	5.7
Jan 2011	369	3	0.8
Feb 2011	377	14	3.7
Mar 2011	381	14	3.7
Apr 2011	376	9	2.4
May 2011	374	15	4.0
Jun 2011	376	15	4.0
Jul 2011	322	14	4.3
Aug 2011	405	18	4.4
Sep 2011	329	19	5.7
Total	4,486	174	3.9

4. A total of **1,355** bacteriological analyses were performed by DOH on Non-PRASA community systems as part of the surveillance monitoring program. Out of these, **490** or **36.2%** percent were found positive. For Non Transient- Non Community systems, a total of **267** bacteriological analyses were performed. Out of these, **21** samples or **7.87%** were found positive.

TABLE 6: PRDOH BACTERIOLOGICAL SURVEILLANCE MONITORING IN NON-PRASA SYSTEMS

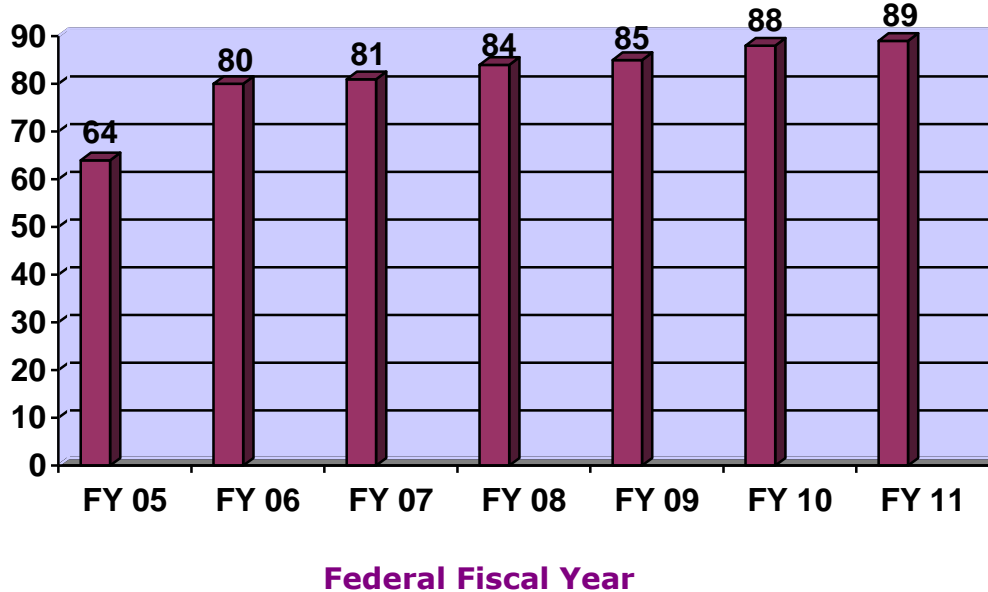
Bacteriology Surveillance Monitoring	Community Systems Under Non PRASA Strategy	Community Non PRASA Systems not under Strategy	All Non PRASA Community Systems
Systems	182	68	250
Samples Taken	1,014	341	1,355
Negative samples	645	220	865
% negative	63.6%	64.5%	63.8%

5. Regarding Non PRASA systems, from a total of **250** community systems, **189** have disinfection treatment; which represents a **76%** of the Non-PRASA CWS.
6. As part of DOH surveillance monitoring, a total of **764** samples were analyzed for turbidity on PRASA systems.
7. As part of DOH surveillance monitoring, a total of **282** samples were analyzed for turbidity on Non PRASA systems.

Compliance Monitoring

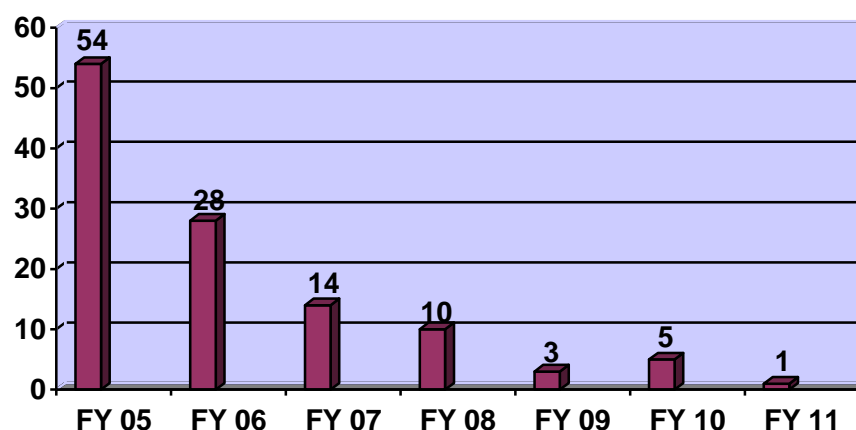
8. A total of **38,990** bacteriological analyses were performed by PRASA as part of the compliance monitoring. Out of these, **298** samples or **0.76%** percent were found positive. See Attachment 4.
9. A total of **26** bacteriology maximum contaminant level (MCL) violations were reported for **21** PRASA systems; **0** persistent systems and **21** intermittent systems. From a total of **188** PRASA systems, **167** or **89%** percent did not exhibit bacteriology violations from October 2010 to September 2011. See Attachment 5.

FIGURE 4: PERCENT OF PRASA SYSTEMS WITHOUT MCL BACTERIOLOGY VIOLATIONS FROM FY 05 THRU FY 11



10. A total of **12** bacteriology monitoring/reporting (MR) violations were reported for **12** PRASA systems; **0** persistent and **12** intermittent. From a total of **188** PRASA systems, **176** systems or **94%** percent did not exhibit MR violations from October 2010 to September 2011. See Attachment 5.
11. A total of **35** treatment technique turbidity violations were reported for **11** PRASA systems, **1** persistent and **10** intermittent. From a total of **109** systems with filtration plants, **98** systems or **90%** percent did not exhibit turbidity violations during FY-11. See Attachment 6.

FIGURE 5: NUMBER OF PRASA TURBIDITY SNC SYSTEMS FROM FY 05 THRU FY 11



12. From a total of **298** Non-PRASA systems, **180** bacteriology MCL violations were reported in **79** Non-PRASA systems, **15** were persistent and **64** were intermittent. On the other hand, regarding the bacteriology monitoring/reporting (MR) violations, a total of **1,683** MR violations were registered, **143** persistent systems and **26** intermittent systems. See Attachment 5.
13. From a total of 115 Non-PRASA surface water systems, 10 are in compliance with the filtration technique.

C. PROJECT REVIEW SECTION

1. A total of 47 plans were submitted and reviewed during FY-11. Out of these, 30 were approved and 17 were pending for approval. The revision included new and substantially modified water supply facilities. See Attachment 7.
2. A total of 24 projects on site inspections were performed.
3. Assistance to water utilities on the proper design and construction of drinking water treatment facilities was provided.
4. Review and endorsement of construction plans for Non PRASA water facilities improvements continued.
5. A total of 33 technical assistances were done.

D. LABORATORY CERTIFICATION

1. The Laboratory Certification Program has already certified the following laboratories. See Attachment 8.

TABLE 7: LABORATORY CERTIFICATION STATUS

NAME	LOCATION
BECKTON ENVIRONMENTAL LAB.	Ponce, PR
ENVIRONMENTAL QUALITY LABORATORIES	Santurce, PR
ACUALAB	Humacao, PR
LAB. CLÍNICO ANALÍTICO	Ponce, PR
CLENDO	Bayamón, PR
ALCHEM LABORATORIES	Ponce, PR
PRASA LABORATORIES	Arecibo, Mayagüez, Ponce, Caguas (PR)
PRDOH LABORATORIES	Arecibo, Mayagüez, Ponce, San Juan (PR)
THAMES WATER OF PUERTO RICO	Arecibo, PR
PACE ANALYTICAL SERVICES	Ormond Beach, Florida Minneapolis, MN Geensburg, PA
TEST AMERICA INC.	Savannah, GA
AMERICAN WATER BELLEVILLE LAB.	Belleville. IL
UNDERWRITERS LAB.	South Bend, Indiana
NATIONAL TESTING LABORATORIES	Ypsilanti, MI
MICROBAC LABORATORIES, INC	Camp Hill, PA
AMA ANALYTICAL SERVICES	Lanham, MD

2. The DOH Quality Control/Certification and Accreditation Section inspected PRASA and Private Laboratories. Several fields follow up audits and on site visits were performed. Correction Plans, Laboratory Manuals and files were evaluated. See Attachment for details.
3. Sample collectors were certified from government and private facilities.
4. The Quality Assurance Management Plan for FY 2012 was submitted to EPA.

E. SEMINARS/TRAINING

As part of continuing education, the following trainings / lectures were offered to PRDOH staff:

- Drinking Water Compliance Troubleshooting Workshop. May 16, 2011. Puerto Rico Convention Center, San Juan.
- 17th Drinking Water Seminar. May 17-18, 2011. Puerto Rico Convention Center, San Juan.
- Stage 2. EPA WEBINAR. August 25, 2011.
- 2011 American Water Works Association (AWWA) Annual Conference and Exposition (ACE). June 12-16, 2011. Washington DC Convention Center.

F. ENFORCEMENT

PRASA submitted analyses results for Bacteriology, Turbidity, Total Trihalomethanes, Regulated Volatile Organic Chemicals (VOC), Synthetic Organic Chemicals (SOC), Pesticides, Herbicides, PCB's, Nitrates, among others. All results were evaluated in order to determine compliance with the drinking water regulation (MR and MCL violations). During FY-11, the following enforcement actions were taken regarding PRASA's systems:

TABLE 8: PRASA ENFORCEMENT ACTIONS*

ENFORCEMENT ACTIONS	QUANTITY
Notices	10
Warning Letters	7
Notices of Violation	50
Follow up actions	103
State Administrative Orders	0
State Administrative Orders closed letters	0

*Data does not include regional enforcement actions

Regarding Non PRASA systems, the following enforcement actions were taken during FY-11:

TABLE 9: NON PRASA ENFORCEMENT ACTIONS

ENFORCEMENT ACTIONS	QUANTITY
Legal Notifications and Boil Water Orders	2,299
Notices of Violation	14

In relation to the Lead and Copper Rule, the Projects Review Section evaluated 25 projects in order to enforce the Lead Prohibition. Other enforcement actions are described below.

TABLE 10: LEAD AND COPPER COMPLIANCE SUMMARY

ACTIVITY	STATUS	
	PRASA	Non PRASA (NTNC)
Corrosion Control Treatment	13	7
Systems exceeding lead and/or copper action levels and Desktop Evaluations were requested.	7	4
Systems under MR for failure to monitor/report	126	10
Desktop Evaluations received	5	4

G. DATA MANAGEMENT

1. All required reports were submitted for FY-11.
2. All required reports were kept for FY-11.
3. The inventory of Public Water Supply systems was quarterly updated and maintained.
4. A record keeping system has been established to monitor water quality sampling and analytical results.
5. PRDOH has successfully installed and implement SDWIS/STATE software as well as submitted the required data and reports to EPA.

H. PUBLIC PARTICIPATION

The main activities carried out during FY-11 were:

1. Activities related to the 17th Drinking Water Seminar.
2. Orientations provided to the owners of Non-PRASA systems throughout the Island (four regions) regarding the operator certification program.

I. SPECIAL REPORTS

The PWSS Program prepared several special reports during FY-11 as follows:

1. Environmental Health Annual Report 209-2010.
2. Non PRASA Enforcement and Compliance Achievement Report.
3. Puerto Rico 2010 Annual Report on Public Water Systems Violations.
4. Lead Ban Report 2010
5. End of Year Evaluation Report FY- 10
6. Mid Year Evaluation Report FY-10
7. Annual Report FY - 10

III. DRINKING WATER STATE REVOLVING FUND

The Drinking Water State Revolving Fund (DWSRF) Program, established by the SDWA, is a financing program for the construction of drinking water infrastructure. Low rate loans provide the financing mechanism for enabling the compliance of the public drinking water systems with the SDWA. It provides an alternative to the drinking water systems for obtaining the economic resources that will foster and facilitate the compliance with the federal law. It enables the development of technical, financial and administrative capacity of the systems in order for these to operate in compliance with the SDWA. It also promotes the establishment of contamination prevention programs from source to tap.

Following, the most relevant achievements and activities of the last year are described:

A. INTENDED USE PLAN

- DOH has been able to comply with all required reports under the ARRA grant, as well as under the DWSRF Program.
- In order to maximize the use the IUP FFY 2009 and clarify funds requested in, amended the Grant FFY 2006 funds and remaining loan funds were reassigned for construction of the Caguas Norte project. These funds corresponded to unused funds of the loan to the Añasco project, which was closed. The remaining amount of \$1,147,191 was transferred to the Caguas Norte project, which is a project included in the Consent Decree. We have to point out that in addition to the annual funds available there was match to these funds was previously provided in the amount of \$229,438.
- In compliance with the deadlines, the *"Drinking Water State Revolving Fund for fiscal Years 2009 and 2010 Biennial Report"* was submitted to EPA on December 28, 2010.
- On April 2011, the funds corresponding to FY 2010 were requested and on June 15, 2011 DOH accepted the conditions of the grant awarded. Reserve funds from two set asides were established, of which \$542,920 corresponds to the Administrative set-aside and \$271,460 for the Technical Assistance set-aside.
- In compliance with the law DOH on May 6, 2011 DOH undertook the public participation process hearing on the FY 2010 funds required as part of the Capitalization Grant request.
- On June 15, 2011, accepted the conditions of the Capitalization Grant of fiscal year 2010 approved by EPA.

- On September 26, 2011 the loan corresponding to the Capitalization Grant of fiscal year 2009 in the amount of \$19,289,335 was executed.
- On September 28, 2011 the *"Report to the Governor on the Efficacy of the Capacity Development Strategy and Progress Made Towards Improving Technical, Managerial and Financial Capacity of Public Water Systems"* was submitted, complying with EPA's established deadline.
- The FY 2004 Grant in the amount of \$13,290,600.00 was closed.
- The total annual amount of funds cash drawn for projects as of September 30, 2011 was \$25,312,681.14. Of this amount, \$13,441,492.06 corresponds to the regular DWSRF Program and \$11,871,189.08, to the ARRA grant. During FFY 2011, DOH was able to increase to 70.8% the cumulative disbursement rate of the ARRA funds and was able to put in operation seven projects out of eleven.
- The construction of five (5) projects (Hatillo Punta Brava, PF Utuado Urbano, and Guánica, Humacao and San Juan Caimito Optimization) funded with the 2009 ARRA allotment was finished and started operation.
- Construction inspections continued for four (4) ARRA projects and three (3) DWSRF regular program projects.
- The Annual Performance Status Report, the Operator Certification Report, and the Capacity Development Report on the activities undertaken by the DWSRF were prepared and submitted to EPA in compliance with the deadlines.
- As of September 30, 2011, the following four (4) projects initiated repayment of their loans:

TABLE 11: PROJECTS REPAYMENT LOANS

Fiscal Year/ Loan Exec. Date	Loan Amount	Project Name	Repayment Date
2004 / Sept. 26, 2006	\$1,551,238.00	Naranjito-Anones	Jan. 1, 2011
2004 / Sept. 26, 2006	\$1,954,000.00	Morovis-Sana Muerto	Jan. 1, 2011
2004 / Sept. 26, 2006	\$6,247,832.00	Naguabo-Río Blanco & Maizalez- Phases IA, IB & II	Jan. 1, 2011
2004 / Sept. 26, 2006	\$2,873,000.00	Hatillo-Camuy	Aug. 1, 2011

TABLE 12: GRANTS/LOANS ACHIEVEMENTS SUMMARY

GRANTS					LOANS			
Fiscal Year	Date Awarded	Amount	Projects Funded	Grant Closeout Date	No. of Loans	Loan Executed	Date Executed	Construction Contracts Executed
2004	9/13/05	\$11,075,000	4	9/30/11				
2006*	5/17/11	\$ 1,147,191						
2009					1	\$19,289,335	9/26/11	1
2010	8/03/11	\$13,573,000	9					

* Grant amendment to reassigned remaining funds from the Añasco project loan of 2008 to Caguas Norte project. The remaining funds total amount is \$4,230,178, of which \$1,147,191 are federal funds, \$229,438 are state match and \$2,853,549 are repayment.

B. INFRASTRUCTURE PROJECTS

The DWSRF provides funds for promoting infrastructure improvements that will facilitate the compliance of the public drinking water systems with the SDWA. The following tables show the construction status of all the infrastructure projects financed by the ARRA and the DWSRF regular program:

TABLE 13: DWSRF REGULAR PROGRAM INFRASTRUCTURE PROJECTS

PWSID	Name project	Approved Funds (\$M)	Construction Status
2591	Trujillo Alto-Sergio Cuevas	11.1	99%
3363	Las Marías FP (Phase I)	12.2	98%
5286	Naguabo-Maizales- (Phases 1-B)	6.2	100%
5527	Naranjito-Anones	1.6	100%.
4313	Yauco Filtration Plant, Raw water and Distribution	12.6	Phase I – 33% Phase II – 100% Phase III – 100%
Total		\$122.8	

TABLE 14: AMERICAN RECOVERY AND REINVESTMENT ACT (ARRA) FUNDS INFRASTRUCTURE PROJECTS

PWSID	Name project	Approved Funds (\$M)	Construction Status
2662 (a)	Hatillo-Punta Brava	3.2	98 %
4545 (a)	Aibonito-La plata	2.6	52%
2702 (b)	Utuado Urbana	0.832	70%
4314 (b)	Yauco-La Jurada	1.4	72%
5386 (a)	Humacao Optimization Program	0.293	100%
2591 (d)	Caimito Optimization Program	0.397	100%

PWSID	Name project	Approved Funds (\$M)	Construction Status
2591 (c)	Guaynabo Optimization Program	0.455	100%
2722 (a)	Barceloneta Optimization Program	0.270	100%
4074 (a)	Guánica Optimization Program	0.166	100%
2591 (e)	Sergio Cuevas - Compliance	4.2	82%
3363 (b)	Las Marías IIA	5.6	58%
Total		\$19.5	

PRDOH revised and determine eleven (11) drinking water projects eligible for receiving assistance for infrastructure construction under the DWSRF.

C- CAPACITY DEVELOPMENT

DOH continued undertaking, general regular day-to-day activities, coordination, and follow-up. DOH did not request funds under this set-aside. Nonetheless, DOH has various responsibilities concerning the Capacity Development and the Capacity Development Assurance Plan and certain related activities were undertaken that were detailed in the Report to the Governor on the Efficacy of the Capacity Strategy and Progress Made Towards Improving Technical, Managerial and Financial Capacity of Public Water Systems, which provides the information of the activities undertaken during the last three years under the Capacity Development Program.

However, DOH has been able to continue with the identification and coordination efforts for assessing and assisting existing systems by providing support to the PWSS Program, including but not limited to the following activities:

- Continue implementing a comprehensive evaluation process, of new and existing small systems, utilizing the Capacity Development Checklist.
- Continue the implementation of the PR Technical Assistance Support (TAS) program in order to carry out assistance initiatives in concert with other Commonwealth agencies.
- Completed the analyzes and evaluation of the Circuit Riders project performance implemented in 25 new systems for assessing systems capacity and assisting systems for availing compliance with capacity development attainment.

- Completed the expansion of the established Circuit Rider Program that provides assistance to communities through the implementation of an action plan and the Capacity Development Manual, including follow-up and guidance in the implementation of their compliance action plans in order to re-enforce the maintenance and/or attainment of capacity.
- Completed technical, financial and administrative assistances in order to provide orientation to the systems participating in the Circuit Riders pilot project, and coordinated follow-up meetings to discuss the capacity requirements and to gather the necessary information to prepare the hydrology maps that identified the systems' components.
- Completed the revision and up-date the Capacity Development Manual used to provide orientation and training to communities based on information gathered from the assistance process.
- Continue providing technical assistance support and follow-up to the 10 systems that were the first systems subject to the use and implementation of the Manual and of the adapted CPE in the process of identifying limiting factors and innovative solutions to eliminate possible causes of significant non-compliance or violations.
- Revise/evaluate systems included in the compilation of community water systems and non-transient, non-community water systems with a history of significant non-compliance that has been retrieved from the existing database and provided to EPA. Prepared and submitted the revised SNC systems.
- Continue undertaking meetings and workshops with entities that can assist and conduct 50 systems towards obtaining compliance with the Capacity Development Program.

The implementation of the Capacity Development Strategy DOH bears continuous advises to the systems on the new requirements established in the law. Up to date, DOH has evaluated eight (8) new systems under these terms and approved seven (7) for operation. The following table discloses this information.

TABLE 15: PRDOH CAPACITY DEVELOPMENT STRATEGY

<i>Method(s) used to evaluate and verify program implementation</i>	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11* *	Total
Proposed new CWSs	6	1	1	0	0	0	0	0	0	8
Proposed new NTNCWSs*	1	0	0	2	1	0	1	1	1	7
Approved new CWSs	3	4	0	0	0	0	0	0	0	7
Approved new NTNCWSs	0	0	0	0	0	0	0	0	0	0
New CWS's commenced operation after 10/1/01	3	4	0	1	0	0	0	0	0	8
New NTNCWSs commenced operation after 10/1/01	0	0	0	1	2	1	0	1	0	5
New CWS's that are not in compliance/reason for non-compliance	-	-	-	-	-	-	-	-	-	-
New NTNCWs that are not in compliance /reason for non-compliance	-	-	-	-	-	-	-	-	-	-

* Only comments issued.

** Numbers provided as of 8/26/11.

D - OPERATOR CERTIFICATION PROGRAM

PRDOH established through Act No. 53 for the Certification of Operators of Drinking Water Treatment Systems and/or Plants an Operator Certification Program in accordance to the SDWA, which requires that all public drinking water systems have to operate under the direct supervision of a certified operator with the license for the corresponding class and category.

As of FY-2011, PRASA had a total of 124 filtration plants associated to the 110 surface water systems. One filtration plant was eliminated during this year since its surface water system was also eliminated. All drinking water filtration plants were visited at least one time by PRDOH personnel during FY 2010-11.

As part of the plan to classify all PRASA filtration plants, PRASA submitted an updated Public Water System Classification for all their systems in October 2, 2009 as part of the negotiations established in the existing Consent Decree between PRDOH and PRASA. PRDOH met with PRASA several times during 2010 to discuss their system's categories.

PRDOH determined the final category for the surface water systems by September 23, 2010 and notified PRASA. The category for the existing systems did not change for FY-2011. The following table shows the surface drinking water systems/plants classified by category:

TABLE 16: PRDOH OPERATOR CERTIFICATION PROGRAM STATUS BY CATEGORY – SURFACE SYSTEMS

Category	DOH Category 2010	DOH Category 2011
I	0	0
II	21	21
III	81	80
IV	23	23
Total	125	124

Based on PRDOH's final category, the plants are divided by region, as follows in 2011:

TABLE 17: PRDOH OPERATOR CERTIFICATION PROGRAM STATUS BY REGION

PRASA Regional Plants by Category 2011					
Region	Number of Plants by Category				
	I	II	III	IV	Total
Metro	0	1	3	3	7
East	0	11	17	4	32
North	0	6	25	1	32
South	0	7	19	6	32
West	0	5	11	5	21
Total	0	21	80	23	124

PRDOH notified PRASA in September 30, 2009 the final ground water PWS categories. Four (4) new ground water systems were put into operation in 2011 and 5 were closed. PRDOH staff prepared the classification formularies and determined the category of the new systems. The category for the existing ground water systems did not changed for FY-2011.

The following table shows the ground drinking water systems classified by category by PRDOH:

TABLE 18: PRDOH OPERATOR CERTIFICATION PROGRAM STATUS BY CATEGORY – GROUND SYSTEMS

Category	DOH Final Category 2010	DOH Final Category 2011
I	80	79
II	0	0
III	0	0
IV	0	0
Total	80	79

PRDOH notified the Board the final determined classification of the systems by July 29, 2011 as required by the regulations. This information is

used by the Board in their process in issuing the corresponding operator's license.

PRASA systems are divided into five regions. For FY 2011, there are 110 surface water systems with 124 water treatment plants. PRDOH understands that PRASA needs at least one certified operator per shift of the plant operation. As part of the Consent Decree, PRASA provided PRDOH the inventory of the treatment plants and the operators in charge of the systems and/or plants in to October 2, 2009. This information has not change for FY 2011.

TABLE 19: TOTAL NUMBER OF PRASA LICENSED OPERATORS BY REGION AND CATEGORY

Region	Category				Number of Licenses	Licenses Not Categorized	Total Licenses by Region
	I	II	III	IV			
East	16	28	37	43	124	2	126
Metro	0	0	1	31	32	0	32
North	3	51	37	27	118	1	119
West	12	16	27	33	88	0	88
South	14	54	18	59	145	0	145
Total	45	149	120	193	507	3	510*
* The total licensed operators include the operators associated to each plant and the operators at the managerial/supervisory level by region.							

There is at least one operator associated to each of the operating shifts of each treatment plant, which in turn is under the supervision of one or more managerial personnel. These management/supervisory personnel are certified operators associated to the five regions.

PRDOH revised the data submitted by PRASA and updated the database to correlate the operator license category according to the treatment plant category classification. All the management/supervisory personnel are certified according to the treatment plant category classification in the five regions.

PRASA's Consent Decree Progress Reports No. 11 and No. 12, which covers the period from October 2010 to March 2011, provides information regarding the trainings offered to the plant operators. The trainings will be offered to approximately 900 operators at different levels. These trainings will capacitate the operators to take the next available exam from the Board. The following table shows PRASA's Training Plan for the 900 operators:

TABLE 20: PRASA'S TRAINING PLAN

Training Topic	Operators trained	% Operators Trained
Drinking Water Rules	932	104
Plant Operation and Practice	50	6
Treatment Optimization	85	9
Law 53 (Operator License)	635	41
Problem Solution Techniques	0	0
Standard Operational Procedures	469	52
Compliance Issues	874	97
Interim Mitigation Measures	100	11

PRASA should provide the information of the operators in training that took the exams offered by the Board in November 2010 and May 2011 on the Progress Report that should be submitted by September 30, 2011. The Board does not have yet the capability to provide this information since the people that take the exams can not be associated to their workplace.

Concerning the Operator Certification Expense Reimbursement Grant Program the following tasks were undertaken during FY 2011:

- a) A new contractual agreement was awarded to continue the operator certification program.
- b) A Notice to Proceed was provided to the contractor.
- c) Continue the oversight of the FY 2010 contract for the administration of the Operator Certification Program.
- d) FY 2010 contract implementation activities:
 - o Initial visit to 10 systems.
 - o Preparation of Action Plan.
 - o Preparation of individual Training Plan.
 - o Monthly visit to 9 systems.
- e) At least 3 meetings were held with the contractor to discuss the coordination of the pending activities of the FY 2010 contract as established in the approved work plan.
- f) At least 2 meetings were held with the contractor to discuss the coordination of the activities of the FY 2011 contract as established in the approved work plan.
- g) Three (3) invoices regarding the operator certification project were received, evaluated, and approved.

- h) Three (3) Progress Reports regarding the operator certification project were received, evaluated, and approved.
- i) Prepared three (3) evaluation reports regarding the activities performed by the contractor and determined percent project progress.
- j) Project system selection:
 - o 25 systems were contacted through phone calls to determine project final participant systems.
 - o Information regarding Law 53 and requirements to obtain an operator license was sent to the selected systems.
- k) One (1) Orientation Workshop was coordinated with the contractor for October 2011.
- l) PRDOH Train-the Trainer Workshop:
 - o PWSS Program personnel were notified through emails the proposed dates for training.
 - o Documents required to take the Board examination were received from the personnel and sent to the qualification agency.
- m) One (1) Drinking Water Operation Training was coordinated with contractor for October 2011.
- n) One (1) Waste Water Operation Training was coordinated with contractor for October 2011.
- o) Technical assistance and orientation has been provided to systems regarding available trainings, application for examination, law requirements, certification and license process, and others.
- p) Prepared and developed a work plan for the activities that will be undertaken during the project period FY 2011.
- q) PRDOH reviewed the status of Assistance Agreement No. CT97298404 for all eligible costs incurred and submitted the appropriate payment request documentation to EPA.
- r) The project accounting was revised and updated to include expenses from FY 2010 contract agreement.
- s) The percent project completion was revised and updated to include project activities from FY 2010 contract agreement.
- t) Kept close communication with EPA's Region 2 Water Security

Grant Coordinator through multiple phone calls, letters, faxes and emails.

- u) Prepared the PR Operator Certification Program Report FY 2011:
 - o Submitted it electronically to EPA on September 30, 2011.
 - o The hard copy will be submitted on October 2011.

E - TECHNICAL ASSISTANCE

This Program provides assistance and orientation in areas such as infrastructure, source, treatment, storage and distribution of the systems with the intention of improving the physical and operational ability of the system in order to promote compliance with the requirements of the law. During the last year the following activities were undertaken:

TABLE 21: DWSRF TECHNICAL ASSISTANCE PROGRAM ACHIEVEMENTS

Output	Outcome / Achievement
Validate Comprehensive Performance Evaluations (CPE's) methodology for approximately 25 small systems	Evaluate interim and final compliance profiles of approximately 25 systems in order to provide assistance for promoting and attaining compliance. Up to date, 25 systems.
Continue providing orientation on funds availability to 25 small systems through site visits, meetings, written communications or telephone calls.	Increase knowledge of and compliance with the requirements of the SDWA. For this current year, 25 new systems have increased their knowledge and are aware of the requirements.
Attend seminars and workshops (1) as part of the training to DWSRF personnel	Stay current with information related to new requirements of the SDWA. At least, attended to one seminar.
Support PWSS program in the inspection of approximately 70 small systems	Assist systems and communities in determining and assessing compliance limiting factors in order to promote compliance. Up to date, 120 inspections to small systems have been undertaken.
Guide approximately 300 small systems in the preparation of their Consumer Confident Reports (CCR's)	Increase the knowledge of systems in an effort to reduce violations. At least, 300 small systems were assisted.
Undertake approximately 50 small systems sanitary surveys	Educate operators in an effort to promote public health, outline necessary improvements and reduce non-compliance. All sanitary surveys were undertaken.
Identify services necessary for compliance, based on the revised CPE	Improve compliance of systems that have CPE's. Up to date, 25 systems.

Output	Outcome / Achievement
Educate small systems on DWSRF program requirements, compliance actions, fund requests and systems evaluations	Increase systems knowledge regarding compliance requirements. Up to date, 25 systems.
Assess approximately 25 systems in the organization process	Conduct approximately 25 systems towards compliance with Commonwealth and federal laws and regulations. Up to date, 25 systems.